

WATERWAYS

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WATERWAYS is a semi-annual newsletter to inform the residents of Durham about various elements of Durham's storm water management program. Public Education, Stormwater Infrastructure (drainage and flooding), and Stormwater Non-infrastructure (water pollution) are the three main areas in the Storm Water Services Division. This edition highlights **Stormwater Infrastructure**.

UNCLOGGING YOUR DRAINAGE PROBLEMS

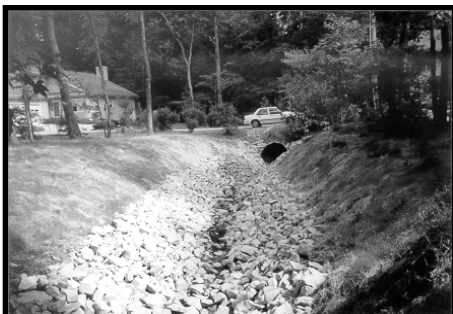
It's Not Just Rain!

While we don't have control over rain ... when it falls or how much falls ... we can work to lessen the impact of the problems it causes. Flooding puts the safety of ourselves and property at risk and also can have a negative impact on our environment. Severe rain events cause excessive runoff that storm drains and streams can't handle. Storms that are larger than what a drainage system is designed to carry cause streets, ditches, yards, and low-lying property to flood. Growth of our city, combined with deterioration of the older drainage infrastructure (*pipes, culverts, catch basins, etc.*) has contributed to flooding and drainage system failures. Additional causes of flooding include storm drain pipes that are too small, damaged, or blocked and ditches and creeks that are clogged with debris and trash.

Reporting Drainage Problems: To report a stormwater drainage problem, call Stormwater Services at 919-560-4326. When you call: (1) Your information [*name, address, telephone number, and the nature of the problem*] will be taken by a staff representative or you may leave a voicemail message and you will be contacted within one business day. (2) An engineering technician will do a site inspection to evaluate the reported problem within five working days of your call. (3) Staff will notify you of their findings in two business days and discuss your drainage concerns. The criteria used to determine the severity of a drainage problem include: public safety hazard, existing or imminent damage to homes and other structures, downstream impact on property, and willingness to grant an easement.



BEFORE (Bank erosion adjacent to house threatens structure)



Top right & bottom left
AFTER (This is a bank stabilization project. Channel was re-graded and rip rap installed at the bottom part of the channel.)

Priority Categories for Drainage Problems on Private Property

Stormwater Services is committed to fixing the worst drainage problems first. Before a problem is repaired, the severity of the situation is analyzed and categorized as a Priority 1, 2, or 3:

Priority 1: A clear and immediate danger exists and poses a threat to personal safety or a building's structural integrity;

Priority 2: A threat exists to personal safety or a building's structural integrity, but the threat is not immediate;

Priority 3: Neither of the conditions specified in Priority 1 or 2 above exists, but the work would reduce damage to property and financial loss.

Getting Our Ducks in a Row: An inventory of the stormwater infrastructure throughout the city is underway to locate and identify the drainage system. Information from the inventory project will help City staff find problems such as inadequate culverts, failing drains, and blocked streams that can hinder the efficient handling of stormwater. In addition, a maintenance schedule will be developed to determine the level of need for replacing, repairing, and maintaining these storm drainage systems.

Evaluating Drainage Projects on Private Property: *To qualify for drainage repairs funded in whole or in part by the stormwater utility fund, a property must be located within the city limits and receive runoff from a publicly maintained street.* A ranking system was developed to gauge the severity of a project. More consideration is given to problems affecting public safety and a building's structural integrity, such as stream bank erosion near a building, fence or tree, (as shown in the "before" photo in front) or a sinkhole in a yard. Also taken into account is the cause of the problem and the condition of the existing storm drainage infrastructure. Problems that do not qualify include: broken or leaking gutters and downspouts, low spots between homes or properties, or leaking basements and wet crawl spaces caused by the slope of your own property.

Currently, there is no cost to residential property owners for utility funded drainage repair projects. In August 2000, City Council voted to eliminate the cost-share requirement for drainage repair projects for "residential units" (*detached single-family house, duplex or manufactured home or mobile home located on an individual lot or parcel of land*). For other residential and non-residential property (*such as townhouses, condominiums, apartments, buildings, etc.*) owners are required to pay up to 50% of the repair costs.

Drainage Projects on Priority List to be Completed.....659
Drainage Projects Completed.....58
Stormwater Utility Funds Spent on Completed Drainage Projects....\$1.3 million



Here's what a Durham couple said about their stormwater repair project:

"We would like to start...with a big "thank you" to the Storm Water Services Staff and to the Street Maintenance Division personnel.... These people have recently completed work on a creek next to our home that had threatened to undermine the basic foundation of our home...the job has removed the problem of storm water runoff undermining our home. For this we are very thankful.

DURHAM



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CITY OF MEDICINE

EARTH DAY 2002 STREAM CLEANUP IN YOUR NEIGHBORHOOD!!

YIMBY (Yes, in my backyard) Celebrate Earth Day, April 20, 2002, by getting your neighbors and volunteers together and having a stream cleanup on private property in your neighborhood. Contact Mike Fuller in Storm Water Services at 919-560-4326 for details and an application.

City of Durham

